

Find the rate of change from the following tables.

1.

x	y
-3	-5
-1	-1
1	3
3	7
5	11

$$R \& C = \frac{+4}{+2} = 2$$

2.

x	y
-11	-4
-6	-1
-1	2
4	5
9	8

$$R \& C = \frac{+3}{+5} = \frac{3}{5}$$

3.

x	y
2	15
5	9
8	3
11	-3
14	-9

$$R \& C = \frac{-6}{+3} = -2$$

4.

x	y
4	-3
3	-4
2	-5
1	-6
0	-7

$$R \& C = \frac{-1}{-1} = 1$$

Find the rate of change from the following tables. Then fill in the missing value

5.

x	y
0	3
4	5
8	7
16	11
32	19
36	21

$$\frac{+4}{+8} = \frac{1}{2}$$

$$\frac{+8}{+16} = \frac{1}{2}$$

$$R \& C = \frac{+2}{+4} = \frac{1}{2}$$

6.

x	y
3	-3
2	-1
1	1
0	3
-1	5
-4	11

$$R \& C = \frac{+2}{-1} = -2$$

Number Patterns

Complete the number sequences with the values that should come next.

4, 7, 10, 13, 16, 19, 22, 25, 28, 31, 34, 37

Pattern: $+3$

9, 9, 9, 11, 11, 11, 13, 13, 13, 15, 15, 15

Pattern: Repeat # 3 times, add 2 + repeat

5, 6, 10, 11, 15, 16, 20, 21, 25, 26, 30, 34

Pattern: $+1$ then $+4$

42, 39, 36, 33, 30, 27, 24, 21, 18, 15, 12, 9

Pattern: -3

16, 15, 14, 13, 12, 11, 10, 9, 8, 7, 6, 5

Pattern: -1

6, 11, 15, 20, 24, 29, 33, 38, 42, 47, 51, 56

Pattern: $+5$, then $+4$

-10, -40, -46, -184, -190, -760, -766, -3064, -3070, -12280, -12286, -49144

Pattern: $\times 4$, then ~~6~~ -6